



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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GOVERNOR

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**Vaughn Thibodeau & Sons, Inc.**  
**Waldo County**  
**Prospect, Maine**  
**A-533-71-P-R/A (SM)**

**Departmental**  
**Findings of Fact and Order**  
**Air Emission License**

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Vaughn Thibodeau & Sons, Inc. (Vaughn Thibodeau) located in Prospect, Maine has applied to renew and amend their Air Emission License, permitting the operation of their hot-mix asphalt plants, ready-mix concrete plant, and rock crushing equipment. Vaughn Thibodeau has requested to install a rock crushing unit (Portable Pegson Jaw #1) and has also moved several of their portable units between their three base locations of Hancock, Prospect, and Bangor, Maine. Being transferred from the Prospect facility is the portable generator #4 and the Minyu Jaw and TelSmith Cone rock crushing equipment to their Bangor facility. All three facilities are up for renewal this year and each facility's air license will be updated to reflect current equipment and operations.

B. The following is a list of equipment that will now be based at the Prospect facility:

**Asphalt Batch Plant:**

<b><u>Equipment</u></b>	<b><u>Process Rate</u></b>	<b><u>Design Capacity</u></b>	<b><u>Fuel Type &amp; Firing Rate</u></b>	<b><u>Manufacturer</u></b>	<b><u>Date of Manufacture</u></b>	<b><u>Control Device</u></b>
<b>Kiln #1</b>	150 tph	35 MMBtu/hr	#2 fuel, 0.5%	Stansteel	1954	baghouse
<b>Boiler #1</b>	--	1.4 MMBtu/hr	#2 fuel, 0.5%	Heat-Tec	2000	none
<b>Gen #1</b>	--	3.2 MMBtu/hr	Diesel, 0.5%	Cat 375 kwh	1999	none

**Portable Asphalt Drum Plant:**

<b><u>Equipment</u></b>	<b><u>Process Rate</u></b>	<b><u>Design Capacity</u></b>	<b><u>Fuel Type &amp; Firing Rate</u></b>	<b><u>Manufacturer</u></b>	<b><u>Date of Manufacture</u></b>	<b><u>Control Device</u></b>
<b>Kiln #2</b>	250 tph	75.6 MMBtu/hr	#2 fuel, 0.5%	Astec	1983	baghouse
<b>Boiler #2</b>	--	2.0 MMBtu/hr	#2 fuel, 0.5%	Hyway	1983	none
<b>Gen #2</b>	--	4.3 MMBtu/hr	Diesel, 0.5%	GenSet 500 kwh	2002	none

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### Concrete Batch Plant

<b>Equipment</b>	<b>Process Rate</b>	<b>Design Capacity</b>	<b>Fuel Type &amp; Firing Rate</b>	<b>Manufacturer</b>	<b>Date of Manufacture</b>	<b>Control Device</b>
<b>Concrete Batch Plant</b>	80 cubic yards/hr	--	--	Erie	1990	baghouse
<b>Boiler #3</b>	--	1.4 MMBtu/hr	#2 fuel, 0.5%	HB Smith	2008	none

### Rock Crushers

<b>Designation</b>	<b>Power Source</b>	<b>Process Rate (tons/hour)</b>	<b>Date of Manufacturer</b>	<b>Control Device</b>
Primary Pioneer Jaw	Electric drive	150	1997	spray nozzles
Secondary TelSmith Cone	Electric drive	150	1997	spray nozzles
Tertiary TelSmith Cone	Electric drive	150	1997	spray nozzles
Portable Pegson Jaw #1 *	Electric drive	200	2008	spray nozzles

\* new equipment previously not listed in the air emissions license

### Diesel Units used for Rock Crushing equipment

<b>Source ID</b>	<b>Max. Capacity</b>	<b>Max. Firing Rate</b>	<b>Manufacturer</b>	<b>Fuel Type, %S</b>
Diesel Gen #3	4.3 MMBtu/hr	31.4 gal/hour	Cat 500 kwh	diesel fuel, 0.5%
Diesel Gen #4 *	1.0 MMBtu/hr	7.3 gal/hour	--	diesel fuel, 0.5%

\* new equipment previously not listed in the air emissions license

### C. Application Classification

Vaughn Thibodeau has requested to install a portable rock crushing unit along with a diesel generator later this year. New emission units at a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. However, future license allowed emissions will not change because the facility has not requested to increase any of the currently established fuel limits.

Therefore, this license is considered a renewal along with a minor amendment for all pollutants. All emissions associated with the new equipment will be subject to Best Available Control Technology (BACT) requirements. With the fuel limits on the asphalt batch plant, asphalt drum plant, and diesel generators, the facility is licensed below the major source thresholds and is considered a synthetic minor.

## **II. BEST PRACTICAL TREATMENT**

### **A. Introduction**

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Definitions Regulation, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

### **B. New Equipment**

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

#### *Portable Rock Crusher*

In 2009, Vaughn Thibodeau plans to install a Portable Pegson Jaw #1 rock crushing unit. The rock crusher was manufactured in 2008 and has a process rate of 200 tons per hour. This rock crusher is subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crusher is particulate emissions. To meet the requirements of BACT for control of particulate matter (PM) emissions from the rock crusher, Vaughn Thibodeau shall maintain water sprays on the rock crusher and operate as needed to control visible emissions. Visible emissions from the rock crusher shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

#### *Diesel Unit*

The new diesel unit (Diesel Generator #4) will provide the power for the new portable Pegson Jaw #1 crusher. The new diesel generator was manufactured in 2003 and is therefore not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for diesel generators manufactured after April 1, 2006.

A summary of the BACT analysis for the generator, rated at maximum design capacity of 1.0 MMBtu/hr, is the following:

1. The total fuel use for the new generator, along with the existing generators at the site, shall not exceed 100,000 gallons per calendar year of diesel fuel with a maximum sulfur content not to exceed 0.5% by weight.
2. Low Sulfur Fuel, 06-096 CMR 106 (last amended July 4, 1999) regulates fuel sulfur content, however in this case a BACT analysis for SO<sub>2</sub> determined a more stringent limit of 0.5% was appropriate and shall be used.
3. Fuel Burning Equipment Particulate Emission Standard, BACT will require this unit to meet a PM limit of 0.12 lb/MMBtu. The PM<sub>10</sub> limits are derived from the PM limits.
4. NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the generator shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

C. Existing Equipment

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

*Asphalt Batch Plant and Asphalt Drum Plant*

Vaughn Thibodeau & Sons operates both an Asphalt Batch Plant (Kiln #1) and an Asphalt Drum Plant (Kiln #2). The asphalt batch plant's Kiln #1 was manufactured in 1955 and is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973. However, the asphalt drum plant, which was recently licensed in 2002, was manufactured in 1983 and therefore is subject to the NSPS. The initial performance test required by 40 CFR Part 60 Subpart I was completed and passed on May 20, 2005.

The asphalt batch plant fires #2 fuel oil, which meets the requirements found in ASTM D396 for #2 oil. Fuel use shall not exceed 290,000 gal/year based on a 12 month rolling total. The asphalt drum plant fires ASTM D396 #2 fuel oil, and has a fuel use limit of 400,000 gallons per year based on a 12 month rolling total.

The following is required for both the asphalt batch plant and the asphalt drum plant.

To meet the requirements of Best Practical Treatment (BPT) for the control of particulate matter (PM) emissions, the asphalt batch and drum plant kilns each vent to a separate baghouse. Opacity from both the asphalt batch and drum plants baghouses is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

Based on the hot mix asphalt processing rates, the average emission rate from each asphalt plant baghouse shall be limited to 0.03 grs/dscf.

The performance of the baghouses shall be constantly monitored by either one of the following at all times the kilns are operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Vaughn Thibodeau & Sons shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

General process emissions from the asphalt batch and drum plants shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period.

Vaughn Thibodeau & Sons may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Department at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil.

#### *Rock Crushers*

Vaughn Thibodeau has decided to relocate some of the rock crushing and diesel units licensed at their three Maine facilities located in Prospect, Bangor, and Hancock. The formerly licensed Prospect rock crushing units, Portable Jaw #1 and Portable Cone #1, will now be licensed at the Bangor facility.

The existing rock crushing units still licensed at the Prospect location are Primary Pioneer Jaw, Secondary Telsmith Cone, and Tertiary Telsmith Cone. The primary, secondary, and tertiary rock crushers are portable units which were all manufactured in 1997 with each having a rated capacity of 150 tons per hour. The primary, secondary, and tertiary rock crushers are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of Best Practical Treatment (BPT) for control of particulate matter (PM) emissions from the rock crushers, Vaughn Thibodeau shall maintain water sprays on the rock crushers and operate as needed to control visible emissions. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

#### *Concrete Batch Plant*

Vaughn Thibodeau operates a concrete batch plant at the Prospect site. This concrete plant has a maximum finished material process rate of 80 cubic yards per hour and is controlled with a curtain wall and its three associated cement silos are controlled with baghouses. The Erie Concrete Batch Plant was constructed in 1990. To meet the requirements of BPT for control of particulate matter (PM) emissions from the cement silos, particulate emissions shall be vented through baghouses maintained for 99% removal efficiency. Visible emissions from the cement silo baghouses are each limited to no greater than 10% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. The facility shall take corrective action if visible emissions from the baghouses exceed 5% opacity.

All components of the concrete batch plant shall be maintained so as to prevent PM leaks. Visible emissions from concrete batching operations shall not exceed 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period.

#### *Boilers #1, #2, and #3*

Boilers #1, #2, and #3 are referred to as HMA Batch Hot Oil Boiler (1.4 MMBtu/hr), HMA Drum Hot Oil Boiler (2.1 MMBtu/hr), and PCC Batch Water Boiler (1.4 MMBtu/hr) by the facility respectively. These boilers are used for the HMA and a batch for the concrete batching operations. All three units are below 10 MMBtu/hr and are therefore not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for

Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

A summary of the BPT analysis for Boiler #1, #2, and #3 is the following:

1. The total fuel use for the boilers shall be included in the total allowable fuel use for the asphalt batch and drum plants of 290,000 gallons per year (on a 12-month rolling total) and 400,000 gallons per year (12-month rolling total) of ASTM D396 #2 fuel oil, respectively.
2. The SO<sub>2</sub> emission limits are based on the firing of fuel which meets the criteria in ASTM D396 for #2 fuel oil.
3. Fuel Burning Equipment Particulate Emission Standard, BPT will require these units to each meet a PM limit of 0.12 lb/MMBtu. The PM<sub>10</sub> limits are derived from the PM limits.
4. NO<sub>x</sub> emission limits are based on data from similar #2 oil fired boilers of this size and age.
5. CO and VOC emission limits are based upon AP-42 data dated 9/98.
6. Visible emissions from the boilers shall each not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.

#### *Diesel Units*

Existing diesel units (Diesel Generator #1, #2, and #3) are utilized primarily to power the asphalt batch and drum plants and the rock crushing equipment.

A summary of the BPT analysis for Generator #1 (3.2 MMBtu/hr), Generator #2 (4.3 MMBtu/hr), and Generator #3 (4.3 MMBtu/hr) is the following:

1. The total fuel use for the generators (including Generator #4) shall not exceed 100,000 gallons per calendar year of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
2. Low Sulfur Fuel, 06-096 CMR 106 (last amended July 4, 1999) regulates fuel sulfur content, however in this case a BPT analysis for SO<sub>2</sub> determined a more stringent limit of 0.05% was appropriate and shall be used.
3. Fuel Burning Equipment Particulate Emission Standard, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. The PM<sub>10</sub> limits are derived from the PM limits.
4. NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the generators shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Stock Piles and Roadways

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

E. General Process Emissions

Visible emissions from a general process (including conveyor belts) shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

F. Facility Emissions

Facility emissions are based on an annual fuel limit of 290,000 gallons of fuel oil for the asphalt batch plant, 400,000 gallons for the asphalt drum plant, and 100,000 gallons per year of diesel fuel for the generators.

**Total Allowable Annual Ton/Year Emissions for the Facility**  
(used to calculate the annual license fee)

<u>Equipment</u>	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>SO<sub>2</sub></u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>VOC</u>
Asphalt Batch Plant	14.3	14.3	5.1	7.0	23.2	2.1
Asphalt Drum Plant	8.6	8.6	1.2	5.9	14.0	3.4
Diesel Engines #1,#2,#3, #4	2.1	2.1	2.0	30.2	6.5	2.4
<b>TOTALS</b>	<b>25.0</b>	<b>25.0</b>	<b>8.3</b>	<b>43.1</b>	<b>43.7</b>	<b>7.9</b>

**III. AMBIENT AIR QUALITY ANALYSIS**

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Modeling and monitoring are not required of a renewal if the total emissions of any pollutant released do not exceed the following:

<u>Pollutant</u>	<u>TPY</u>
PM	25
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	100
CO	250



Based on the total facility licensed emissions, Vaughn Thibodeau is below the emissions level required for modeling and monitoring.

### **ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-533-71-P-R/A, subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

### **STANDARD CONDITIONS**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions. [06-096 CMR 115]
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. § 353. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
  - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department

that equipment may be operating out of compliance with emission standards or license conditions; or

2. pursuant to any other requirement of this license to perform stack testing.
- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
- B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

#### **SPECIFIC CONDITIONS**

**(16) Hot-mix Asphalt (HMA) Plants**

- A. Emissions from the hot mix asphalt batch plant and drum plant shall vent to separate baghouses, and all components of both asphalt plants shall be maintained so as to prevent PM leaks. [MEDEP 06-096 CMR 115, BPT]
- B. The performance of the baghouses shall be constantly monitored by either one of the following at all times the Dryer or Rotary Drum is operating [MEDEP 06-096 CMR 115, BPT]:
  - 1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Vaughn Thibodeau & Sons shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
  - 2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the plants are operating with insufficient control and corrective action shall be taken immediately.
- C. To document maintenance of the baghouses, the license shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the asphalt plant location. [MEDEP 06-096 CMR 115, BPT]
- D. Opacity from each baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP 06-096 CMR 101]
- E. General process emissions from the asphalt batch plant and the asphalt drum plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]
- F. Fuel use records and receipts for the asphalt Dryer and Rotary Drum shall be maintained for at least six years and made available to the Department upon request. The facility will maintain a log showing 12-month rolling total fuel use and maintain fuel receipts with % sulfur. [06-096 CMR 115, BPT]
- G. Vaughn Thibodeau & Sons shall be limited to the use of 290,000 gal/year of #2 fuel oil in the asphalt batch plant (12 month rolling total), with a sulfur content not to exceed 0.5% and 400,000 gal/year of #2 fuel oil in the asphalt drum plant (12 month rolling total), with a sulfur content not to exceed 0.5%

by weight. Emissions from each of the baghouses shall not exceed the following [MEDEP 06-096 CMR 115, BPT]:

Pollutant	grs/dscf	Batch Plant lb/hr	Drum Plant lb/hr
PM	0.03	24.7	20.1
PM <sub>10</sub>	-	24.7	20.1
SO <sub>2</sub>	-	8.8	2.8
NO <sub>x</sub>	-	12.0	13.8
CO	-	40.0	32.5
VOC	-	3.6	8.0

- H. Vaughn Thibodeau & Sons has performed the initial performance test to demonstrate compliance with the PM emission limits as required in 40 CFR Part 60 Subpart I.
- I. The licensee shall not process more than 10,000 cubic yards of petroleum contaminated soils per year without prior approval from the Department. Processing of petroleum contaminated soils may require a solid waste processing facility license under 06-096 CMR409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [MEDEP 06-096 CMR 115, BPT]
- J. Without prior approval from the Department, the licensee shall only process soils contaminated with gasoline and #2 fuel oil. [MEDEP 06-096 CMR 115, BPT]
- K. The licensee shall not process contaminated soils which are classified as hazardous waste or which have unknown contaminants. [MEDEP 06-096 CMR 115, BPT]
- L. When processing petroleum contaminated soils, the licensee shall maintain records which specify the quantity and type of contaminant in the soil, the origin of the soil and the contaminant, and the characterization of the contaminated soil. In addition when processing contaminated soil, the licensee shall maintain records of processing temperature, asphalt feed rate, fuel use, soil moisture content, and dryer throughput, on an hourly basis. [MEDEP 06-096 CMR 115, BPT]

(17) **Concrete Batch Plant**

- A. Particulate emissions from the cement silos shall be vented through a baghouse and all components of the batch plant shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT]
- B. To document maintenance of the cement silo baghouses, Vaughn Thibodeau shall keep a maintenance log recording the date and location of all bag failures

as well as all routine maintenance. The maintenance log shall be kept on-site at the concrete batch plant location. [06-096 CMR 115, BPT]

- C. Opacity from the cement silo baghouses is limited to no greater than 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. Vaughn Thibodeau shall take corrective action if visible emissions from the baghouses exceed 5% opacity. [06-096 CMR 101]
- D. PM emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(18) **Boilers #1, #2, and #3**

- A. The total fuel use for the boilers shall be included in the total allowable fuel use for the asphalt batch and drum plants of 290,000 gallons per year and 400,000 gallons per year of ASTM D396 #2 fuel oil, respectively, on a 12-month rolling total basis. [06-096 CMR 115, BPT]

- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boilers #1, #2, #3	PM	0.12	06-096 CMR 115, BPT

- C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.2	0.2	0.7	0.6	0.1	0.1
Boiler #2	0.3	0.3	1.1	0.9	0.1	0.1
Boiler #3	0.2	0.2	0.7	0.6	0.1	0.1

- D. Visible emissions from Boiler #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

**(19) Rock Crushers**

- A. Vaughn Thibodeau shall install and maintain spray nozzles for particulate control on the Primary Pioneer Jaw, Secondary Telsmith Cone, Tertiary Telsmith Cone, and the Portable Pegson Jaw #1 and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115 (BPT) and 06-096 CMR 101]
- B. Vaughn Thibodeau shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]
- C. Vaughn Thibodeau shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the primary, secondary and tertiary rock crushers. The operation log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

**(20) New Source Performance Standards for rock crushers**

- A. Vaughn Thibodeau's Portable Pegson Jaw #1 rock crushing unit is subject to 40 CFR Part 60 Subparts A and OOO and the facility shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).
- B. Vaughn Thibodeau shall have an initial performance test performed on the rock crushing unit per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675. This consists of a certified Method 9 observation. The performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Vaughn Thibodeau shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7 day notice to the regional inspector.

**(21) Diesel Units**

- A. Total fuel use for Generator #1, #2, and #3 shall not exceed 100,000 gallons per calendar year of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Records of fuel use shall be kept on a 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1, #2, #3, #4	PM	0.12	06-096 CMR 115, BACT

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.4	0.4	0.9	14.1	3.0	1.1
Generator #2	0.5	0.5	1.2	19.0	4.1	1.5
Generator #3	0.5	0.5	1.2	19.0	4.1	1.5
Generator #4	0.2	0.2	0.3	4.4	1.0	0.4

D. Visible emissions from each generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(22) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(23) **General Process Sources**

Visible emissions from any general process source shall (including conveyor belts) not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101 and 06-096 CMR 115, BPT]

(24) **Equipment Relocation** [06-096 CMR 115, BPT]

A. Vaughn Thibodeau shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written notice may be sent by mail, facsimile (fax), or e-mail. Notification sent by mail shall be sent to the address below or to a Department Regional Office:



Vaughn Thibodeau & Sons, Inc.  
Waldo County  
Prospect, Maine  
A-533-71-P-R/A (SM)

Departmental  
Findings of Fact and Order  
Air Emission License

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Attn: Relocation Notice  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at [www.maine.gov/dep/air/compliance/forms/relocation](http://www.maine.gov/dep/air/compliance/forms/relocation).

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (25) Vaughn Thibodeau shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [06-096 CMR 115, BPT]
- (26) Vaughn Thibodeau shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard [38 M.R.S.A. §605-C].

DONE AND DATED IN AUGUSTA, MAINE THIS 27<sup>th</sup> DAY OF July, 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks Jr.  
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 17, 2009

Date of application acceptance: March 3, 2009

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Edwin Cousins, Bureau of Air Quality

